



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/621,154

07/16/2003

James L. Sumiejski

3218R

1207

26645

7590

08/04/2009

THE LUBRIZOL CORPORATION
ATTN: DOCKET CLERK, PATENT DEPT.
29400 LAKELAND BLVD.
WICKLIFFE, OH 44092

EXAMINER

NERANGIS, VICKEY MARIE

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

08/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/621,154	Applicant(s) SUMIEJSKI ET AL.	
	Examiner VICKY NERANGIS	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27 and 29-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27 and 29-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/19/2009 has been entered.
2. All outstanding rejections are withdrawn in light of applicant's amendment filed on 5/19/2009.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Claim Rejections - 35 USC § 112

4. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 31, the term "the boron compound" lacks antecedent basis.

Claim Rejections - 35 USC § 103

5. Claims 27 and 29-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward (WO 00/70001).

Art Unit: 1796

Ward discloses a lubricating composition for use in transmissions (abstract, page 3, lines 19-31) preparing by mixing the following ingredients (page 22, lines 23-25): 0.05-5 wt % (page 18, lines 7-8) phosphorus anti-wear additive including preferably a phosphite ester having alkyl groups with at least 8 carbons atoms (page 15, lines 26-29) or mixtures of alkyl groups with C₁₈, C₂₀, C₂₂, and C₂₄ (page 16, lines 30-34); 0.1-0.45 wt % (page 20, lines 22-24) one or more friction modifiers including isostearic acid condensation products of polyamines such as tetraethylene pentamine (exemplified, Supplement B in Table 4) and diaminomethane including those containing amide and imidazoline functional groups (page 18, lines 20-23; page 19, lines 8-31) and borated epoxides prepared by reacting hydrocarbyl epoxide with boric acid or boron trioxide (page 19, line 32 to page 20, line 21; page 23, table); 0.1-5 wt % (page 9, lines 15-17) borated dispersant from the reaction of polyisobutylene-substituted succinic anhydride with polyethyleneamines (page 9, lines 19-36; page 23, lines 10-12); and at least 80 wt % (page 4, lines 10-15) oil of lubricating viscosity of API Groups II or III (page 4, lines 10-26) or Group (IV (page 4, line 37); and other additives (page 20, lines 31-37). A concentrate can be prepared comprising 10-50 parts by weight lubricating oil (page 21, lines 11-30). Ward teaches on page 3, lines 19-31, that its lubricant composition is useful as automatic and manual transmission fluids and as transaxle lubricants.

In examples 16 and 19, the lubricant composition comprises 0.3 wt % alkyl phosphite + phosphoric acid; 0.2 wt % condensation of isostearic acid and tetraethylene pentamine; 0.2 wt % borated epoxide; borated dispersant "Disp. B" that is from the reaction of polyisobutylene-substituted succinic anhydride with polyethyleneamines followed by reaction with boric acid (page 23, lines 10-12); 83-86 wt % 100 N oil; and other additives such as antioxidants and

Art Unit: 1796

sulfur-containing agents (page 23, "Base Formulation Table"; page 24, Table 1; page 27, Table 4).

In these examples, Ward fails to disclose the number of carbon atoms in the alkyl of the alkyl phosphite; however, Ward teaches that the phosphite ester can be a dialkyl hydrogen phosphite (page 16, lines 11-12) wherein the alkyl groups are preferably with at least 8 carbon atoms (page 15, lines 26-29) or mixtures of alkyl groups with C₁₈, C₂₀, C₂₂, and C₂₄ (page 16, lines 30-34).

Given that Ward teaches the use of phosphites with alkyl groups like presently as the anti-wear additive, it would have been obvious to one of ordinary skill in the art to utilize alkyl phosphite with at least 8 carbon atoms and preferably ones with 18, 20, 22, and 24 carbon atoms, absent a showing of unexpected or surprising results.

6. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ward (WO 00/70001) in view of Farnig et al (US 5,006,270).

The discussion with respect to Ward in paragraph 5 above is incorporated here by reference.

Ward does not explicitly teach the use of an optional borate ester like presently claimed, however, it is open to the use of antioxidants (page 20, line 31).

Farnig et al discloses a lubricant composition and teaches that borate esters such as tributyl borate (col. 3, lines 53-65) have excellent multifunctional/antioxidant activity (col. 1, lines 16-19).

Given that Ward is open to antioxidants and further given that borate esters such as tributyl borate provide for excellent antioxidant properties in lubricant compositions as taught by Farnag et al, it would have been obvious to one of ordinary skill in the art to utilize tributyl borate in the composition of Ward to impart desired antioxidant properties.

Response to Arguments

7. Applicant's arguments filed 5/19/2009 have been fully considered but they are not persuasive. Specifically, applicant argues (A) that the selection of the friction modifier that is a condensation product of a fatty acid with an ethylenepolyamine and an alkyl phosphate with an alyl group containing 12-30 carbon atoms provides for unexpected results; (B) that the relative amounts of friction reducing or enhancing ingredients in the data is reasonably commensurate in scope with the scope of the claims; and (C) that Ward fails to teaches that its lubricant composition is used in automatic transmissions.

With respect to argument (A), the data in the declaration filed on 5/1/2006 has been fully considered but is insufficient to establish unexpected results given that only C₁₄ alkyl hydrogen phosphite is exemplified and cannot served to establish unexpected results for the claimed alkyl phosphite with 12-30 carbon atoms in alkyl group. Case law holds that evidence is insufficient to rebut a *prima facie* case if not commensurate in scope with the claimed invention. *In re Grasselli*, 713 F.2d 731, 741, 218 USPQ 769, 777 (Fed. Cir. 1983). Furthermore, this data only provides support for unexpected results for a combination of 1-hydroxyethyl-2-heptadecenyl imidazoline and C₁₄ alkyl hydrogen phosphite.

The data in the declaration filed on 3/26/2008 has been fully considered but is insufficient to establish unexpected results given that only a dibutyl (C₄) alkyl hydrogen phosphite is exemplified which is outside the scope of the claimed alkyl phosphite having 12-30 carbon atoms in the alkyl group.

With respect to argument (B), examiner has considered arguments and agrees. Should the data be reasonably commensurate with respect to the claimed friction modifier and phosphite ester anti-wear additive, the 103 rejection over Ward will be withdrawn.

With respect to argument (C), while Ward teaches that its lubricant composition is especially useful in continuously variable transmission, it also teaches that the lubricant composition is "particularly effective" as "automatic transmission fluids" (page 3, lines 29-30). Ward argues that what is useful for automatic transmission fluids is not necessarily effective for continuously variable transmissions, however, what is useful for continuously variable transmissions are suitable for automatic transmissions.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vickey Nerangis whose telephone number is (571) 272-2701.

The examiner can normally be reached on Monday - Friday, 8:30 a.m. - 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8/3/2009

vn

/Vickey Nerangis/
Examiner, Art Unit 1796